

GenBank (Release 140, feb 2004)

1630 100 0.0

P_AAF44256 Human PRO1387 (UNQ722) nucleotide sequence SEQ ID NO:421. 630 bp,
cDNA, PAT 02-APR-2001

ACCESSION P_AAF44256

KEYWORDS GENESEQ; Human; secreted and transmembrane protein; PRO; cytostatic;
cell death; cancer; chromosomal mapping; gene mapping; tissue
typing; diagnostic assay; patent; patentdb (v200408, 15-APR-2004).

SOURCE Homo sapiens.

ORGANISM Homo sapiens.

REFERENCE 1 (bases 1 to 1630)

AUTHORS Ashkenazi,A.J., Baker,K.P., Botstein,D., Desnoyers,L.,
Eaton,D.L. Ferrara,N., Fong,S., Gerber,H., Gerritsen,M.E.,
Goddard,A., Godowski,P.J. Grimaldi,C.J., Gurney,A.L.,
Kljavin,I.J., Napier,M.A., Pan,J., Paoni,N.F. Roy,M.A.,
Stewart,T.A., Tumas,D., Watanabe,C.K., Williams,P.M., Wood,W.I.
Zhang,Z.TITLE PRO polynucleotides used to produce polypeptides used to target
bioactive molecules such as toxins, radiolabels or antibodies, to
specific cells, to cause targeted cell death.JOURNAL Patent: WO200073454-A1; Filing Date: 30-MAR-2000; 2000WO-US008439;
Publication Date: 07-DEC-2000; Priority: 02-JUN-1999;
99WO-US012252. 23-JUN-1999; 99US-0141037P. 07-JUL-1999;
99US-0143048P. 20-JUL-1999; 99US-0144758P. 26-JUL-1999;
99US-0145698P. 28-JUL-1999; 99US-0146222P. 17-AUG-1999;
99US-0149396P. 15-SEP-1999; 99WO-US021090. 15-SEP-1999;
99WO-US021547. 08-OCT-1999; 99US-0158663P. 30-NOV-1999;
99WO-US028313. 01-DEC-1999; 99WO-US028301. 16-DEC-1999;
99WO-US030095. 20-DEC-1999; 99WO-US030911. 05-JAN-2000;
2000WO-US000219. 06-JAN-2000; 2000WO-US000376. 11-FEB-2000;
2000WO-US003565. 18-FEB-2000; 2000WO-US004341. 22-FEB-2000;
2000WO-US004414. 24-FEB-2000; 2000WO-US004914. 24-FEB-2000;
2000WO-US005004. 02-MAR-2000; 2000WO-US005841. 15-MAR-2000;
2000WO-US006884. 20-MAR-2000; 2000WO-US007377; Assignee: (GETH)
GENENTECH INC; Cross Reference: WPI; 2001-032160/04. P-PSDB;
AAB65287; Patent Format: Claim 2; Fig 303; 935pp; English.COMMENT The present invention describes human secreted and transmembrane PRO
proteins. The PRO proteins have cytostatic activity. The PRO
proteins can be used for targeted delivery of bioactive molecules,
such as toxins, radiolabels or antibodies, that cause cell death.
PRO nucleotide sequences, and their fragments, can be used as
hybridisation probes, in chromosomal and gene mapping, and in the
generation of anti-sense RNA and DNA. They may also be used to
produce transgenic animals which are used to develop and screen
therapeutically useful reagents. The PRO nucleotide and protein
sequence can be used for tissue typing and in treating cancer.
Anti-PRO antibodies can be used in diagnostic assays. AAF44270 to
AAF44470 represent PCR primers and hybridisation probes used in the
isolation of human PRO sequences. AAF44087 to AAF44269 and AAB65154
to AAB65300 represent human PRO polynucleotide and protein
sequences given in the exemplification of the present invention

FEATURES Location/Qualifiers

BASE COUNT 425 a 369 c 452 g 384 t

ORIGIN

1630 100 0.0

P_AAS21503 Human cDNA sequence encoding for PRO1387 polypeptide. 630 bp,
cDNA, PAT 24-OCT-2001

ACCESSION P_AAS21503

KEYWORDS GENESEQ; Human secretory and transmembrane; PRO; mammalian; cancer;
lung; breast; prostate; cervical; tumour necrosis factor-alpha;
TNF-alpha; cartilage; ear; proliferation; glucose; free fatty acid;
skeletal muscle; adipocyte; A-peptide; factor VIIA; gene therapy;
patent; patentdb (v200408, 15-APR-2004).

SOURCE Homo sapiens.

ORGANISM Homo sapiens.

REFERENCE 1 (bases 1 to 1630)

AUTHORS Baker,K.P., Beresini,M., Deforge,L., Desnoyers,L., Filvaroff,E.,
Gao,W. Gerritsen,M.E., Goddard,A., Godowski,P.J., Gurney,A.L.,
Sherwood,S. Smith,V., Stewart,T.A., Tumas,D., Watanabe,C.K.,
Wood,W.I., Zhang,Z.

TITLE Isolated , secretory and transmembrane PRO polypeptide used to
detect other PRO polypeptides, link bioactive molecules to cells
expressing PRO polypeptides, and detect the presence of mammalian
tumors e.g. lung, breast, prostate, cervical.

JOURNAL Patent: WO200140466-A2; Filing Date: 01-DEC-2000; 2000WO-US032678;
Publication Date: 07-JUN-2001; Priority: 01-DEC-1999;
99WO-US028301. 01-DEC-1999; 99WO-US028634. 02-DEC-1999;
99WO-US028551. 02-DEC-1999; 99WO-US028564. 02-DEC-1999;
99WO-US028565. 09-DEC-1999; 99US-0170262P. 16-DEC-1999;
99WO-US030095. 20-DEC-1999; 99WO-US030911. 20-DEC-1999;
99WO-US030999. 30-DEC-1999; 99WO-US031243. 30-DEC-1999;
99WO-US031274. 05-JAN-2000; 2000WO-US000219. 06-JAN-2000;
2000WO-US000277. 06-JAN-2000; 2000WO-US000376. 11-FEB-2000;
2000WO-US003565. 18-FEB-2000; 2000WO-US004341. 18-FEB-2000;
2000WO-US004342. 22-FEB-2000; 2000WO-US004414. 24-FEB-2000;
2000WO-US004914. 24-FEB-2000; 2000WO-US005004. 01-MAR-2000;
2000WO-US005601. 02-MAR-2000; 2000WO-US005841. 03-MAR-2000;
2000US-0187202P. 10-MAR-2000; 2000WO-US006319. 15-MAR-2000;
2000WO-US006884. 20-MAR-2000; 2000WO-US007377. 21-MAR-2000;
2000WO-US007532. 30-MAR-2000; 2000WO-US008439. 17-MAY-2000;
2000WO-US013705. 22-MAY-2000; 2000WO-US014042. 30-MAY-2000;
2000WO-US014941. 02-JUN-2000; 2000WO-US015264. 05-JUN-2000;
2000US-0209832P. 28-JUL-2000; 2000WO-US020710. 11-AUG-2000;
2000WO-US022031. 23-AUG-2000; 2000WO-US023522. 24-AUG-2000;
2000WO-US023328. 08-NOV-2000; 2000WO-US030952. 10-NOV-2000;
2000WO-US030873; Assignee: (GETH) GENENTECH INC; Cross Reference:
WPI; 2001-408281/43. P-PSDB; AAU12431; Patent Format: Claim 3; Fig
519; 813pp; English.

COMMENT AAS21244-AAS21518 encode for novel human secretory and transmembrane
PRO polypeptides. The PRO polypeptides are useful to detect other
PRO polypeptides, to link bioactive molecules to cells expressing
PRO polypeptides, to modulate biological activities of cells
expressing PRO polypeptides, and to detect the presence of
mammalian lung, colon, breast, prostate, rectal, cervical or liver
tumours by comparing PRO polypeptide expression in a cell sample to
that in a control sample. Some of the 275 sequences are also useful
to stimulate the release of tumour necrosis factor-alpha
(TNF-alpha) from human blood, the proliferation or differentiation
of chondrocytes, the proliferation or gene expression in pericyte
cells, the release of proteoglycans from cartilage, the
proliferation of inner ear utricular supporting cells or of T-
lymphocytes, the release of a cytokine from peripheral blood

monocytes (PBMCs), or the proliferation of endothelial cells. Some of the PRO polypeptides may modulate glucose or free fatty acid uptake by skeletal muscle cells or by adipocytes; or inhibit binding of A-peptide to factor VIIA. The PRO polypeptides can be used in assays to identify molecules involved in binding interactions. The polynucleotides encoding PRO polypeptides can be used to generate probes, antisense RNA/DNA, transgenic or knock out animals and can be used in gene therapy

FEATURES Location/Qualifiers
 BASE COUNT 425 a 369 c 452 g 384 t
 ORIGIN

1630 100 0.0

P_AAZ65110 Membrane-bound protein PRO1387 encoding cDNA. 630 bp,
 cDNA, PAT 05-APR-2000

ACCESSION P_AAZ65110

KEYWORDS GENESEQ; Membrane-bound polypeptide; PRO polypeptide; LDL receptor;
 TIE ligand; pharmaceutical; receptor immunoadhesin; gene mapping;
 patent; patentdb (v200408, 15-APR-2004).

SOURCE Homo sapiens.

ORGANISM Homo sapiens.

REFERENCE 1 (bases 1 to 1630)

AUTHORS Baker,K., Chen,J., Goddard,A., Gurney,A.L., Smith,V.,
 Watanabe,C.K. Wood,W.I., Yuan,J.

TITLE Membrane-bound proteins and related nucleotide sequences.

JOURNAL Patent: WO9963088-A2; Filing Date: 02-JUN-1999; 99WO-US012252;
 Publication Date: 09-DEC-1999; Priority: 02-JUN-1998;

98US-0087607P. 02-JUN-1998; 98US-0087609P. 02-JUN-1998;
 98US-0087759P. 03-JUN-1998; 98US-0087827P. 04-JUN-1998;
 98US-0088021P. 04-JUN-1998; 98US-0088025P. 04-JUN-1998;
 98US-0088028P. 04-JUN-1998; 98US-0088029P. 04-JUN-1998;
 98US-0088030P. 04-JUN-1998; 98US-0088033P. 04-JUN-1998;
 98US-0088326P. 05-JUN-1998; 98US-0088167P. 05-JUN-1998;
 98US-0088202P. 05-JUN-1998; 98US-0088212P. 05-JUN-1998;
 98US-0088217P. 09-JUN-1998; 98US-0088655P. 10-JUN-1998;
 98US-0088722P. 10-JUN-1998; 98US-0088730P. 10-JUN-1998;
 98US-0088734P. 10-JUN-1998; 98US-0088738P. 10-JUN-1998;
 98US-0088740P. 10-JUN-1998; 98US-0088741P. 10-JUN-1998;
 98US-0088742P. 10-JUN-1998; 98US-0088810P. 10-JUN-1998;
 98US-0088811P. 10-JUN-1998; 98US-0088824P. 10-JUN-1998;
 98US-0088825P. 10-JUN-1998; 98US-0088826P. 11-JUN-1998;
 98US-0088858P. 11-JUN-1998; 98US-0088861P. 11-JUN-1998;
 98US-0088863P. 11-JUN-1998; 98US-0088876P. 12-JUN-1998;
 98US-0089090P. 12-JUN-1998; 98US-0089105P. 16-JUN-1998;
 98US-0089440P. 16-JUN-1998; 98US-0089512P. 16-JUN-1998;
 98US-0089514P. 17-JUN-1998; 98US-0089532P. 17-JUN-1998;
 98US-0089538P. 17-JUN-1998; 98US-0089598P. 17-JUN-1998;
 98US-0089599P. 17-JUN-1998; 98US-0089600P. 17-JUN-1998;
 98US-0089653P. 18-JUN-1998; 98US-0089801P. 18-JUN-1998;
 98US-0089907P. 18-JUN-1998; 98US-0089908P. 19-JUN-1998;
 98US-0089947P. 19-JUN-1998; 98US-0089948P. 19-JUN-1998;
 98US-0089952P. 22-JUN-1998; 98US-0090246P. 22-JUN-1998;
 98US-0090252P. 22-JUN-1998; 98US-0090254P. 23-JUN-1998;
 98US-0090349P. 23-JUN-1998; 98US-0090355P. 24-JUN-1998;
 98US-0090429P. 24-JUN-1998; 98US-0090431P. 24-JUN-1998;
 98US-0090435P. 24-JUN-1998; 98US-0090444P. 24-JUN-1998;
 98US-0090445P. 24-JUN-1998; 98US-0090461P. 24-JUN-1998;

98US-0090472P. 24-JUN-1998; 98US-0090535P. 24-JUN-1998;
 98US-0090538P. 24-JUN-1998; 98US-0090540P. 24-JUN-1998;
 98US-0090557P. 25-JUN-1998; 98US-0090676P. 25-JUN-1998;
 98US-0090678P. 25-JUN-1998; 98US-0090688P. 25-JUN-1998;
 98US-0090690P. 25-JUN-1998; 98US-0090691P. 25-JUN-1998;
 98US-0090694P. 25-JUN-1998; 98US-0090695P. 25-JUN-1998;
 98US-0090696P. 26-JUN-1998; 98US-0090862P. 26-JUN-1998;
 98US-0090863P. 01-JUL-1998; 98US-0091358P. 01-JUL-1998;
 98US-0091360P. 02-JUL-1998; 98US-0091478P. 02-JUL-1998;
 98US-0091486P. 02-JUL-1998; 98US-0091519P. 02-JUL-1998;
 98US-0091544P. 02-JUL-1998; 98US-0091626P. 02-JUL-1998;
 98US-0091628P. 02-JUL-1998; 98US-0091633P. 02-JUL-1998;
 98US-0091646P. 02-JUL-1998; 98US-0091673P. 07-JUL-1998;
 98US-0091978P. 07-JUL-1998; 98US-0091982P. 09-JUL-1998;
 98US-0092182P. 10-JUL-1998; 98US-0092472P. 20-JUL-1998;
 98US-0093339P. 30-JUL-1998; 98US-0094651P. 04-AUG-1998;
 98US-0095282P. 04-AUG-1998; 98US-0095285P. 04-AUG-1998;
 98US-0095301P. 04-AUG-1998; 98US-0095302P. 04-AUG-1998;
 98US-0095318P. 04-AUG-1998; 98US-0095321P. 04-AUG-1998;
 98US-0095325P. 10-AUG-1998; 98US-0095916P. 10-AUG-1998;
 98US-0095929P. 10-AUG-1998; 98US-0096012P. 11-AUG-1998;
 98US-0096143P. 11-AUG-1998; 98US-0096146P. 12-AUG-1998;
 98US-0096329P. 17-AUG-1998; 98US-0096757P. 17-AUG-1998;
 98US-0096766P. 17-AUG-1998; 98US-0096768P. 17-AUG-1998;
 98US-0096773P. 17-AUG-1998; 98US-0096791P. 17-AUG-1998;
 98US-0096867P. 17-AUG-1998; 98US-0096891P. 17-AUG-1998;
 98US-0096894P. 17-AUG-1998; 98US-0096895P. 17-AUG-1998;
 98US-0096897P. 18-AUG-1998; 98US-0096949P. 18-AUG-1998;
 98US-0096950P. 18-AUG-1998; 98US-0096959P. 18-AUG-1998;
 98US-0096960P. 18-AUG-1998; 98US-0097022P. 19-AUG-1998;
 98US-0097141P. 20-AUG-1998; 98US-0097218P. 24-AUG-1998;
 98US-0097661P. 26-AUG-1998; 98US-0097951P. 26-AUG-1998;
 98US-0097952P. 26-AUG-1998; 98US-0097954P. 26-AUG-1998;
 98US-0097955P. 26-AUG-1998; 98US-0097971P. 26-AUG-1998;
 98US-0097974P. 26-AUG-1998; 98US-0097978P. 26-AUG-1998;
 98US-0097979P. 26-AUG-1998; 98US-0097986P. 26-AUG-1998;
 98US-0098014P. 31-AUG-1998; 98US-0098525P. 16-SEP-1998;
 98US-0100634P. 12-JAN-1999; 99US-0115565P; Assignee: (GETH)
 GENENTECH INC; Cross Reference: WPI; 2000-072883/06. P-PSDB;
 AAY66764; Patent Format: Claim 2; Fig 303; 822pp; English.

COMMENT

The invention provides membrane-bound PRO polypeptides and polynucleotides encoding them. The PRO sequences of the invention were identified based on extracellular domain homology screening. The PRO sequences have homology with proteins including LDL receptors, TIE ligands and various enzymes. The membrane-bound proteins and receptor molecules are useful as pharmaceutical and diagnostic agents. Receptor immunoadhesins, for instance, can be used as therapeutic agents to block receptor-ligand interactions. The membrane-bound proteins can also be employed for screening of potential peptide or small molecule inhibitors of the relevant receptor/ligand interaction. The PRO encoding sequences are useful as hybridization probes, in chromosome and gene mapping and in the generation of antisense RNA and DNA. PRO nucleic acid sequences will also be useful for the preparation of PRO polypeptides, especially by recombinant techniques

FEATURES

Location/Qualifiers

BASE COUNT 425 a 369 c 452 g 384 t

ORIGIN

1630 100 0.0

P_AAA77683 Human PRO1387 cDNA sequence SEQ ID NO:219. 630 bp,
cDNA, PAT 07-NOV-2000

ACCESSION P_AAA77683

KEYWORDS GENESEQ; Human; PRO; promotion; inhibition; angiogenesis;
cardiovascularisation; diagnosis; trauma; wound; cancer;
atherosclerosis; cardiac hypertrophy; angiogenic; proliferative;
cardiant; cardiovascular; antiatherosclerotic; cytostatic; gene
therapy; vaccine; patent; patentdb (v200408, 15-APR-2004).

SOURCE Homo sapiens.

ORGANISM Homo sapiens.

REFERENCE 1 (bases 1 to 1630)

AUTHORS Ashkenazi,A.J., Baker,K.P., Ferrara,N., Gerber,H., Hillan,K.J.
Goddard,A., Godowski,P.J., Gurney,A.L., Klein,R.D., Kuo,S.S.,
Paoni,N.F. Smith,V., Watanabe,C.K., Williams,P.M., Wood,W.I.TITLE Nucleic acids encoding PRO polypeptides useful for preventing,
diagnosing and treating diagnosing a cardiovascular, endothelial or
angiogenic disorders in mammals.JOURNAL Patent: WO200032221-A2; Filing Date: 30-NOV-1999; 99WO-US028313;
Publication Date: 08-JUN-2000; Priority: 01-DEC-1998;
98WO-US025108. 16-DEC-1998; 98US-0112850P. 12-JAN-1999;
99US-0115554P. 08-MAR-1999; 99WO-US005028. 12-MAR-1999;
99US-0123957P. 28-APR-1999; 99US-0131445P. 14-MAY-1999;
99US-0134287P. 02-JUN-1999; 99WO-US012252. 23-JUN-1999;
99US-0141037P. 20-JUL-1999; 99US-0144758P. 26-JUL-1999;
99US-0145698P. 01-SEP-1999; 99WO-US020111. 08-SEP-1999;
99WO-US020594. 13-SEP-1999; 99WO-US020944. 15-SEP-1999;
99WO-US021090. 15-SEP-1999; 99WO-US021547. 05-OCT-1999;
99WO-US023089. 29-OCT-1999; 99US-0162506P; Assignee: (GETH)
GENENTECH INC; Cross Reference: WPI; 2000-412154/35. P-PSDB;
AAB24433; Patent Format: Claim 61; Fig 91; 315pp; English.COMMENT The present invention describes nucleic acids encoding PRO
polypeptides useful for preventing, diagnosing and treating
diagnosing a cardiovascular, endothelial or angiogenic disorder in
mammals by modulating cell proliferation, angiogenesis and
cardiovascularisation, and for identifying agonists and antagonists
of these processes. The nucleic acids and the proteins they encode
may be used in the prevention, treatment and diagnosis of diseases
associated with inappropriate PRO expression such as
cardiovascular, endothelial or angiogenic disorders in mammals (e.g.
atherosclerosis, cancers and cardiac hypertrophy). For example, the
nucleic acids (NCs) and vectors containing them and the PRO
polypeptide may be used to treat disorders associated with decreased
PRO expression. AAA77510 to AAA77721 and AAB24388 to AAB24435
represent nucleotide and protein sequences used in the
exemplification of the present invention

FEATURES Location/Qualifiers

BASE COUNT 425 a 369 c 452 g 384 t

ORIGIN

1621 100 0.0

P_AAC58619 Human PRO1387 protein UNQ722 encoding cDNA SEQ ID NO:186. 621 bp,
cDNA, PAT 29-JAN-2001

ACCESSION P_AAC58619

KEYWORDS GENESEQ; Human; immune related disease; diagnosis; antiinflammatory;

cardiant; dermatological; antiarthritic; antirheumatic; immunosuppressive; haemostatic; antithyroid; antidiabetic; nootropic; neuroprotective; antianaemic; hepatotropic; virucide; antipsoriatic; antiallergic; antiasthmatic; systemic lupus erythematosus; rheumatoid arthritis; osteoarthritis; spondyloarthropathy; systemic sclerosis; sarcoidosis; idiopathic inflammatory myopathy; Sjogren's syndrome; thyroiditis; systemic vasculitis; autoimmune haemolytic anaemia; diabetes mellitus; autoimmune thrombocytopaenia; immune-mediated renal disease; demyelinating disease; hepatobiliary disease; Whipple's disease; inflammatory bowel disease; gluten-sensitive enteropathy; autoimmune disease; immune-mediated skin disease; allergic disease; immunological disease; transplantation associated disease; graft rejection; graft-versus-host-disease; patent; patentdb (v200408, 15-APR-2004).

SOURCE Homo sapiens.
 ORGANISM Homo sapiens.
 REFERENCE 1 (bases 1 to 1621)
 AUTHORS Ashkenazi, A.J., Baker, K.P., Goddard, A., Gurney, A.L., Hebert, C., Henzel, W., Kabakoff, R.C., Lu, Y., Pan, J., Pennica, D., Shelton, D.L., Smith, V. Stewart, T.A., Tumas, D., Watanabe, C.K., Wood, W.I., Yan, M.
 TITLE Sixty four PRO polypeptides, useful in the diagnosis and treatment of immune related disorders, e.g. systemic lupus erythematosus, rheumatoid arthritis, osteoarthritis, thyroiditis and diabetes mellitus.
 JOURNAL Patent: WO200053758-A2; Filing Date: 02-MAR-2000; 2000WO-US005841; Publication Date: 14-SEP-2000; Priority: 08-MAR-1999;
 99WO-US005028. 10-MAR-1999; 99US-0123618P. 12-MAR-1999;
 99US-0123957P. 23-MAR-1999; 99US-0125775P. 12-APR-1999;
 99US-0128849P. 20-APR-1999; 99WO-US008615. 28-APR-1999;
 99US-0131445P. 04-MAY-1999; 99US-0132371P. 14-MAY-1999;
 99US-0134287P. 02-JUN-1999; 99WO-US012252. 23-JUN-1999;
 99US-0141037P. 20-JUL-1999; 99US-0144758P. 26-JUL-1999;
 99US-0145698P. 28-JUL-1999; 99US-0146222P. 01-SEP-1999;
 99WO-US020111. 08-SEP-1999; 99WO-US020594. 13-SEP-1999;
 99WO-US020944. 15-SEP-1999; 99WO-US021090. 15-SEP-1999;
 99WO-US021547. 05-OCT-1999; 99WO-US023089. 29-OCT-1999;
 99US-0162506P. 29-NOV-1999; 99WO-US028214. 30-NOV-1999;
 99WO-US028313. 30-NOV-1999; 99WO-US028409. 01-DEC-1999;
 99WO-US028301. 01-DEC-1999; 99WO-US028634. 02-DEC-1999;
 99WO-US028551. 02-DEC-1999; 99WO-US028564. 02-DEC-1999;
 99WO-US028565. 16-DEC-1999; 99WO-US030095. 20-DEC-1999;
 99WO-US030999. 30-DEC-1999; 99WO-US031274. 05-JAN-2000;
 2000WO-US000219. 06-JAN-2000; 2000WO-US000277. 06-JAN-2000;
 2000WO-US000376. 11-FEB-2000; 2000WO-US003565. 18-FEB-2000;
 2000WO-US004341. 18-FEB-2000; 2000WO-US004342. 22-FEB-2000;
 2000WO-US004414; Assignee: (GETH) GENENTECH INC; Cross Reference: WPI; 2000-572271/53. P-PSDB; AAB33454; Patent Format: Claim 23; Fig 81; 309pp; English.

COMMENT The present invention describes sixty four human PRO proteins which can be used in the treatment of immune related diseases. The human PRO proteins, anti-PRO antibodies, agonists and antagonists are useful for treating and diagnosing immune related disorders. The disorders are selected from systemic lupus erythematosus, rheumatoid arthritis, osteoarthritis, juvenile chronic arthritis, spondyloarthropathies, systemic sclerosis, idiopathic inflammatory

myopathies, Sjogren's syndrome, systemic vasculitis, sarcoidosis, autoimmune haemolytic anaemia, autoimmune thrombocytopaenia, thyroiditis, diabetes mellitus, immune-mediated renal disease, demyelinating diseases of the central and peripheral nervous systems, hepatobiliary diseases, inflammatory bowel disease, gluten-sensitive enteropathy and Whipple's disease, autoimmune or immune-mediated skin diseases, allergic diseases, immunological diseases of the lung, and transplantation associated diseases including graft rejection and graft-versus-host-disease. AAC58397 to AAC58578 represent PCR primers and hybridisation probes used in the isolation of human PRO sequences. AAC58579 to AAC58642 and AAB33414 to AAB33477 represent human PRO polynucleotide and protein sequences given in the exemplification of the present invention

FEATURES Location/Qualifiers
 BASE COUNT 424 a 366 c 448 g 383 t
 ORIGIN

1620 100 0.0

P_AAA27133 Human inflammation associated cDNA #11. 751 bp,
 cDNA, PAT 11-SEP-2000

ACCESSION P_AAA27133

KEYWORDS GENESEQ; Inflammation; rheumatoid arthritis; Crohn's disease;
 asthma; multiple sclerosis; allergy; AIDS; diabetes mellitus;
 antiinflammatory; gene therapy; human; patent; patentdb (v200408,
 15-APR-2004).

SOURCE Homo sapiens.

ORGANISM Homo sapiens.

REFERENCE 1 (bases 1 to 1751)

AUTHORS Walker, M.G., Volkmuth, W., Klingler, T.M.

TITLE New human inflammation-associated polypeptide useful for diagnosis,
 prevention and treatment of inflammatory diseases comprises product
 of gene coexpressed with e.g. CD16, L-selectin and IP-30.

JOURNAL Patent: WO200029574-A2; Filing Date: 04-NOV-1999; 99WO-US026234;
 Publication Date: 25-MAY-2000; Priority: 18-NOV-1998;
 98US-00195292; Assignee: (INCY-) INCYTE PHARM INC; Cross Reference:
 WPI; 2000-387787/33. P-PSDB; AAY94452; Patent Format: Claim 2; Page
 37-38; 43pp; English.

COMMENT Eleven novel inflammation-associated genes have been identified in
 cDNA libraries from various tissues. The genes were selected
 according to their coexpression with the known inflammation genes,
 CD16, L-selectin, Src-like adapter protein, IP-30, superoxidase
 homoenzyme subunits, alpha-1-antitrypsin, Clq-A, 5-lipoxygenase
 activating protein and SRC family tyrosine kinase. The novel
 polynucleotides may be used in hybridization assays to diagnose a
 disease or condition associated with altered expression of the
 inflammation genes. Antibodies against the genes may be useful in
 compositions for the diagnosis and treatment of such diseases
 associated with inflammation including rheumatoid arthritis, Crohn's
 disease, multiple sclerosis, AIDS, diabetes mellitus, asthma and
 allergy. Additionally the polynucleotides of the invention may be
 used for gene therapy. The present sequence is human inflammation
 associated cDNA #11, derived from Incyte Clone 3507924

FEATURES Location/Qualifiers
 CDS 186..1370
 /*tag= a
 /product= "inflammation associated protein #11"
 BASE COUNT 454 a 396 c 479 g 422 t

ORIGIN

1619 100 0.0
P_AAI59802 Human polynucleotide SEQ ID NO 3791. 876 bp, cDNA, PAT 22-OCT-2001
ACCESSION P_AAI59802
KEYWORDS GENESEQ; Human; nootropic; immunosuppressant; cytostatic; gene

therapy; cancer; peripheral nervous system; neuropathy; central nervous system; CNS; Alzheimer's; Parkinson's disease; Huntington's disease; haemostatic; amyotrophic lateral sclerosis; Shy-Drager Syndrome; chemotactic; chemokinetic; thrombolytic; drug screening; arthritis; inflammation; leukaemia; patent; patentdb (v200408, 15-APR-2004).

SOURCE Homo sapiens.

ORGANISM Homo sapiens.

REFERENCE 1 (bases 1 to 1876)

AUTHORS Tang, Y.T., Liu, C., Asundi, V., Chen, R., Ma, Y., Qian, X.B., Ren, F., Wang, D. Wang, J., Wang, Z., Wehrman, T., Xu, C., Xue, A.J., Yang, Y., Zhang, J., Zhao, Q.A. Zhou, P., Goodrich, R., Drmanac, R.T.

TITLE Novel nucleic acids and polypeptides, useful for treating disorders such as central nervous system injuries.

JOURNAL Patent: WO200153312-A1; Filing Date: 26-DEC-2000; 2000WO-US034263; Publication Date: 26-JUL-2001; Priority: 23-DEC-1999; 99US-00471275. 21-JAN-2000; 2000US-00488725. 25-APR-2000; 2000US-00552317. 20-JUN-2000; 2000US-00598042. 19-JUL-2000; 2000US-00620312. 03-AUG-2000; 2000US-00653450. 14-SEP-2000; 2000US-00662191. 19-OCT-2000; 2000US-00693036. 29-NOV-2000; 2000US-00727344; Assignee: (HYSE-) HYSEQ INC; Cross Reference: WPI; 2001-442253/47. P-PSDB; AAM40646; Patent Format: Claim 1; SEQ ID NO 3791; 10078pp; English.

COMMENT The invention relates to human nucleic acids (AAI57798-AAI61369) and the encoded polypeptides (AAM38642-AAM42213) with nootropic, immunosuppressant and cytostatic activity. The polynucleotides are useful in gene therapy. A composition containing a polypeptide or polynucleotide of the invention may be used to treat diseases of the peripheral nervous system, such as peripheral nervous injuries, peripheral neuropathy and localised neuropathies and central nervous system diseases, such as Alzheimer's, Parkinson's disease, Huntington's disease, amyotrophic lateral sclerosis, and Shy-Drager Syndrome. Other uses include the utilisation of the activities such as: Immune system suppression, Activin/inhibin activity, chemotactic/chemokinetic activity, haemostatic and thrombolytic activity, cancer diagnosis and therapy, drug screening, assays for receptor activity, arthritis and inflammation, leukaemias and C.N.S disorders. Note: The sequence data for this patent did not form part of the printed specification

FEATURES Location/Qualifiers
BASE COUNT 493 a 401 c 524 g 458 t
ORIGIN

1505 100 0.0
P_AAZ52456 HTRM clone 319415 DNA sequence. 649 bp, DNA, PAT 24-FEB-2000
ACCESSION P_AAZ52456

KEYWORDS GENESEQ; HTRM; human transcriptional regulatory molecule; arteriosclerosis; AIDS; arteriosclerosis; cirrhosis; cancer; leukaemia; diabetes mellitus; ss; Addison's disease; multiple sclerosis; rheumatoid arthritis; infection; trauma; myasthenia gravis; adenocarcinoma; immune disorder; treatment; patent; patentdb

(v200408, 15-APR-2004).

SOURCE Homo sapiens.
 ORGANISM Homo sapiens.
 REFERENCE 1 (bases 1 to 1649)
 AUTHORS Hillman,J.L., Bandman,O., Lal,P., Yue,H., Reddy,R., Tang,Y.T.
 Gerstin,E.H., Patterson,C., Baughn,M.R., Azimzai,Y., Lu,D.A.M.
 TITLE New peptides useful for diagnosis, prevention and treatment of
 cancer and immune disorders.
 JOURNAL Patent: WO9957144-A2; Filing Date: 04-MAY-1999; 99WO-US009935;
 Publication Date: 11-NOV-1999; Priority: 05-MAY-1998;
 98US-0084254P. 07-AUG-1998; 98US-0095827P. 02-OCT-1998;
 98US-0102745P; Assignee: (INCY-) INCYTE PHARM INC; Cross Reference:
 WPI; 2000-052941/04. P-PSDB; AAY73371; Patent Format: Claim 9; Page
 179; 193pp; English.

COMMENT AAZ52410-Z52474 are human transcriptional regulator molecule (HTRM)
 nucleotide sequences. The HTRM protein and nucleotide sequences are
 useful for preventing or treating disorders associated with
 decreased expression or activity of HTRM which include cell
 proliferative disorders such as arteriosclerosis and cirrhosis;
 cancers including adenocarcinoma and leukaemia; immune disorders
 such as AIDS, Addison's disease, diabetes mellitus, rheumatoid
 arthritis, multiple sclerosis, systemic lupus erythematosus, and
 myasthenia gravis; infections and trauma. Antagonists of the HTRM
 polypeptides are useful for treating or preventing disorders
 associated with increased expression or activity of HTRMs. HTRM
 polypeptides, their immunogenic fragments or oligopeptides are
 useful for screening libraries of compounds in drug screening
 techniques. Polynucleotides encoding HTRM are useful for blocking
 the transcription of mRNA and regulating gene function by
 modulating the activity of HTRM. Vectors expressing HTRM or
 agonists can also be used to prevent or treat disorder associated
 with decreased HTRM expression. Antibodies which specifically bind
 HTRM and polynucleotides encoding HTRM are useful for diagnosing
 disorders associated with the expression of HTRM, particularly in
 assays that detect the expression of HTRM. Nucleotide sequences
 encoding HTRM may be useful to generate hybridization probes useful
 in mapping the naturally occurring genomic sequence and to detect
 differences in gene sequences among normal, carrier and affected
 individuals. Using diagnostic assays, cancer can be detected prior
 to the appearance of clinical symptoms and thereby progression of
 cancer can be prevented by aggressive treatment or preventive
 measures

FEATURES	Location/Qualifiers			
BASE COUNT	433 a	372 c	455 g	389 t
ORIGIN				

1393 100 0.0
 P_AAI58016 Human polynucleotide SEQ ID NO 219. 473 bp, cDNA, PAT 22-OCT-2001
 ACCESSION P_AAI58016
 KEYWORDS GENESEQ; Human; nootropic; immunosuppressant; cytostatic; gene
 therapy; cancer; peripheral nervous system; neuropathy; central
 nervous system; CNS; Alzheimer's; Parkinson's disease; Huntington's
 disease; haemostatic; amyotrophic lateral sclerosis; Shy-Drager
 Syndrome; chemotactic; chemokinetic; thrombolytic; drug screening;
 arthritis; inflammation; leukaemia; patent; patentdb (v200408,
 15-APR-2004).

SOURCE Homo sapiens.

ORGANISM Homo sapiens.

REFERENCE 1 (bases 1 to 1473)

AUTHORS Tang,Y.T., Liu,C., Asundi,V., Chen,R., Ma,Y., Qian,X.B., Ren,F., Wang,D. Wang,J., Wang,Z., Wehrman,T., Xu,C., Xue,A.J., Yang,Y., Zhang,J., Zhao,Q.A. Zhou,P., Goodrich,R., Drmanac,R.T.

TITLE Novel nucleic acids and polypeptides, useful for treating disorders such as central nervous system injuries.

JOURNAL Patent: WO200153312-A1; Filing Date: 26-DEC-2000; 2000WO-US034263; Publication Date: 26-JUL-2001; Priority: 23-DEC-1999; 99US-00471275. 21-JAN-2000; 2000US-00488725. 25-APR-2000; 2000US-00552317. 20-JUN-2000; 2000US-00598042. 19-JUL-2000; 2000US-00620312. 03-AUG-2000; 2000US-00653450. 14-SEP-2000; 2000US-00662191. 19-OCT-2000; 2000US-00693036. 29-NOV-2000; 2000US-00727344; Assignee: (HYSE-) HYSEQ INC; Cross Reference: WPI; 2001-442253/47. P-PSDB; AAM38860; Patent Format: Claim 1; SEQ ID NO 219; 10078pp; English.

COMMENT The invention relates to human nucleic acids (AAI57798-AAI61369) and the encoded polypeptides (AAM38642-AAM42213) with nootropic, immunosuppressant and cytostatic activity. The polynucleotides are useful in gene therapy. A composition containing a polypeptide or polynucleotide of the invention may be used to treat diseases of the peripheral nervous system, such as peripheral nervous injuries, peripheral neuropathy and localised neuropathies and central nervous system diseases, such as Alzheimer's, Parkinson's disease, Huntington's disease, amyotrophic lateral sclerosis, and Shy-Drager Syndrome. Other uses include the utilisation of the activities such as: Immune system suppression, Activin/inhibin activity, chemotactic/chemokinetic activity, haemostatic and thrombolytic activity, cancer diagnosis and therapy, drug screening, assays for receptor activity, arthritis and inflammation, leukaemias and C.N.S disorders. Note: The sequence data for this patent did not form part of the printed specification

FEATURES Location/Qualifiers

BASE COUNT	383 a	341 c	394 g	355 t
ORIGIN				

Wed Nov 21 13:57:28 2001 [BLASTN 2.2.1 [Jul-12-2001], NCBI]
/home/ruby/va/Molbio/carpanda/tempblast/ss.DNA68872 (1630 bp)

(A)
P2730PIC46

Sequences producing High-scoring Segment Pairs:	Frame	Score	Match	Pct	E-val
1 P_AAF44256 Human PRO1387 (UNQ722) nucleotide sequen	+	1630	1630	100	0.0
2 P_AAS21503 Human cDNA sequence encoding for PRO1387	+	1630	1630	100	0.0
3 P_AAZ65110 Membrane-bound protein PRO1387 encoding	+	1630	1630	100	0.0
4 P_AAA77683 Human PRO1387 cDNA sequence SEQ ID NO:21	+	1630	1630	100	0.0
5 P_AAC58619 Human PRO1387 protein UNQ722 encoding cD	+	1621	1621	100	0.0
6 P_AAA27133 Human inflammation associated cDNA #11.	+	1620	1620	100	0.0
7 P_AAI59802 Human polynucleotide SEQ ID NO 3791. cD	+	1616	1619	100	0.0
8 P_AAZ52456 HTRM clone 319415 DNA sequence.	+	1505	1505	100	0.0
9 P_AAI58016 Human polynucleotide SEQ ID NO 219. cDN	+	1383	1393	100	0.0

>1 P_AAF44256 Human PRO1387 (UNQ722) nucleotide sequence SEQ ID NO:421. (1630 bp) [1 seg]

Score = 1630 (3231 bits), Expect = 0.0

Identities = 1630/1630 (100%), at 1,1-1630,1630, Strand +/-

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ss.DNA68872      1 CGGCTCGAGTGCAGCTGTGGGGAGATTTCAGTGCATTGCCTCCCCTGGGTGCTCTTCATC
*****
P_AAF44256       1 CGGCTCGAGTGCAGCTGTGGGGAGATTTCAGTGCATTGCCTCCCCTGGGTGCTCTTCATC

ss.DNA68872     61 TTGGATTTGAAAGTTGAGAGCAGCATGTTTTGCCCACTGAAACTCATCCTGCTGCCAGTG
*****
P_AAF44256      61 TTGGATTTGAAAGTTGAGAGCAGCATGTTTTGCCCACTGAAACTCATCCTGCTGCCAGTG

ss.DNA68872    121 TTA CTGGATTATTCCTTGGGCCTGAATGACTTGAATGTTTCCCCGCCTGAGCTAACAGTC
*****
P_AAF44256     121 TTA CTGGATTATTCCTTGGGCCTGAATGACTTGAATGTTTCCCCGCCTGAGCTAACAGTC

ss.DNA68872    181 CATGTGGGTGATTTCAGCTCTGATGGGATGTGTTTTCCAGAGCACAGAAGACAAATGTATA
*****
P_AAF44256     181 CATGTGGGTGATTTCAGCTCTGATGGGATGTGTTTTCCAGAGCACAGAAGACAAATGTATA

ss.DNA68872    241 TTCAAGATAGACTGGACTCTGTCAACAGGAGAGCACGCCAAGGACGAATATGTGCTATAC
*****
P_AAF44256     241 TTCAAGATAGACTGGACTCTGTCAACAGGAGAGCACGCCAAGGACGAATATGTGCTATAC

ss.DNA68872    301 TATTACTCCAATCTCAGTGTGCCTATTGGGCGCTTCCAGAACCGCGTACACTTGATGGGG
*****
P_AAF44256     301 TATTACTCCAATCTCAGTGTGCCTATTGGGCGCTTCCAGAACCGCGTACACTTGATGGGG

ss.DNA68872    361 GACATCTTATGCAATGATGGCTCTCTCCTGCTCCAAGATGTGCAAGAGGCTGACCAGGGA
*****
P_AAF44256     361 GACATCTTATGCAATGATGGCTCTCTCCTGCTCCAAGATGTGCAAGAGGCTGACCAGGGA

ss.DNA68872    421 ACCTATATCTGTGAAATCCGCCTCAAAGGGGAGAGCCAGGTGTTCAAGAAGGCGGTGGTA
*****
P_AAF44256     421 ACCTATATCTGTGAAATCCGCCTCAAAGGGGAGAGCCAGGTGTTCAAGAAGGCGGTGGTA

ss.DNA68872    481 CTGCATGTGCTTCCAGAGGAGGCCAAAGAGCTCATGGTCCATGTGGGTGGATTGATTGAG
*****
P_AAF44256     481 CTGCATGTGCTTCCAGAGGAGGCCAAAGAGCTCATGGTCCATGTGGGTGGATTGATTGAG

ss.DNA68872    541 ATGGGATGTGTTTTCCAGAGCACAGAAGTGAAACACGTGACCAAGGTAGAATGGATATTT
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BLAST RESULTS A-1

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*****
P_AAF44256 541 ATGGGATGTGTTTTCAGAGCACAGAAGTGAAACACGTGACCAAGGTAGAATGGATATTT
ss.DNA68872 601 TCAGGACGGCGCGCAAAGGAGGAGATTGTATTTTCGTTACTACCACAAACTCAGGATGTCT
*****
P_AAF44256 601 TCAGGACGGCGCGCAAAGGAGGAGATTGTATTTTCGTTACTACCACAAACTCAGGATGTCT
ss.DNA68872 661 GTGGAGTACTCCCAGAGCTGGGGCCACTTCCAGAATCGTGTGAACCTGGTGGGGGACATT
*****
P_AAF44256 661 GTGGAGTACTCCCAGAGCTGGGGCCACTTCCAGAATCGTGTGAACCTGGTGGGGGACATT
ss.DNA68872 721 TTCCGCAATGACGGTTCATCATGCTTCAAGGAGTGAGGGAGTCAGATGGAGGAAACTAC
*****
P_AAF44256 721 TTCCGCAATGACGGTTCATCATGCTTCAAGGAGTGAGGGAGTCAGATGGAGGAAACTAC
ss.DNA68872 781 ACCTGCAGTATCCACCTAGGGAACCTGGTGTTCAGAAAACCATTGTGCTGCATGTCAGC
*****
P_AAF44256 781 ACCTGCAGTATCCACCTAGGGAACCTGGTGTTCAGAAAACCATTGTGCTGCATGTCAGC
ss.DNA68872 841 CCGGAAGAGCCTCGAACACTGGTGACCCCGGCAGCCCTGAGGCCTCTGGTCTTGGGTGGT
*****
P_AAF44256 841 CCGGAAGAGCCTCGAACACTGGTGACCCCGGCAGCCCTGAGGCCTCTGGTCTTGGGTGGT
ss.DNA68872 901 AATCAGTTGGTGATCATTGTGGGAATTGTCTGTGCCACAATCCTGCTGCTCCCTGTTCTG
*****
P_AAF44256 901 AATCAGTTGGTGATCATTGTGGGAATTGTCTGTGCCACAATCCTGCTGCTCCCTGTTCTG
ss.DNA68872 961 ATATTGATCGTGAAGAAGACCTGTGGAAATAAGAGTTCAGTGAATTCTACAGTCTTGGTG
*****
P_AAF44256 961 ATATTGATCGTGAAGAAGACCTGTGGAAATAAGAGTTCAGTGAATTCTACAGTCTTGGTG
ss.DNA68872 1021 AAGAACACGAAGAAGACTAATCCAGAGATAAAAAGAAAAACCCTGCCATTTTGAAAGATGT
*****
P_AAF44256 1021 AAGAACACGAAGAAGACTAATCCAGAGATAAAAAGAAAAACCCTGCCATTTTGAAAGATGT
ss.DNA68872 1081 GAAGGGGAGAAACACATTTACTCCCCAATAATTGTACGGGAGGTGATCGAGGAAGAAGAA
*****
P_AAF44256 1081 GAAGGGGAGAAACACATTTACTCCCCAATAATTGTACGGGAGGTGATCGAGGAAGAAGAA
ss.DNA68872 1141 CCAAGTGAAAAATCAGAGGCCACCTACATGACCATGCACCCAGTTTGGCCTTCTCTGAGG
*****
P_AAF44256 1141 CCAAGTGAAAAATCAGAGGCCACCTACATGACCATGCACCCAGTTTGGCCTTCTCTGAGG
ss.DNA68872 1201 TCAGATCGGAACAACCTCACTTGAAAAAAGTCAGGTGGGGGAATGCCAAAAACACAGCAA
*****
P_AAF44256 1201 TCAGATCGGAACAACCTCACTTGAAAAAAGTCAGGTGGGGGAATGCCAAAAACACAGCAA
ss.DNA68872 1261 GCCTTTTGAGAAGAATGGAGAGTCCCTTCATCTCAGCAGCGGTGGAGACTCTCTCCTGTG
*****
P_AAF44256 1261 GCCTTTTGAGAAGAATGGAGAGTCCCTTCATCTCAGCAGCGGTGGAGACTCTCTCCTGTG
ss.DNA68872 1321 TGTGTCCTGGGCCACTCTACCAAGTATTTTCAGACTCCCGCTCTCCAGCTGTCCTCCTGT
*****
P_AAF44256 1321 TGTGTCCTGGGCCACTCTACCAAGTATTTTCAGACTCCCGCTCTCCAGCTGTCCTCCTGT
ss.DNA68872 1381 CTCATTGTTTGGTCAATACACTGAAGATGGAGAATTTGGAGCCTGGCAGAGAGACTGGAC
*****

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BLAST RESULTS A-2

P_AAF44256 1381 CTCATTGTTTGGTCAATACACTGAAGATGGAGAATTTGGAGCCTGGCAGAGAGACTGGAC
 ss.DNA68872 1441 AGCTCTGGAGGAACAGGCCTGCTGAGGGGAGGGGAGCATGGACTTGGCCTCTGGAGTGGG

 P_AAF44256 1441 AGCTCTGGAGGAACAGGCCTGCTGAGGGGAGGGGAGCATGGACTTGGCCTCTGGAGTGGG
 ss.DNA68872 1501 ACACTGGCCCTGGGAACCAGGCTGAGCTGAGTGGCCTCAAACCCCCCGTTGGATCAGACC

 P_AAF44256 1501 ACACTGGCCCTGGGAACCAGGCTGAGCTGAGTGGCCTCAAACCCCCCGTTGGATCAGACC
 ss.DNA68872 1561 CTCCTGTGGGCAGGGTTCTTAGTGGATGAGTTACTGGGAAGAATCAGAGATAAAAACCAA

 P_AAF44256 1561 CTCCTGTGGGCAGGGTTCTTAGTGGATGAGTTACTGGGAAGAATCAGAGATAAAAACCAA
 ss.DNA68872 1621 CCCAAATCAA

 P_AAF44256 1621 CCCAAATCAA

>2 P_AAS21503 Human cDNA sequence encoding for PRO1387 polypeptide. (1630 bp) [1 seg]

Score = 1630 (3231 bits), Expect = 0.0

Identities = 1630/1630 (100%), at 1,1-1630,1630, Strand +/+

ss.DNA68872 1 CGGCTCGAGTGCAGCTGTGGGGAGATTTCACTGCATTGCCTCCCCTGGGTGCTCTTCATC

 P_AAS21503 1 CGGCTCGAGTGCAGCTGTGGGGAGATTTCACTGCATTGCCTCCCCTGGGTGCTCTTCATC
 ss.DNA68872 61 TTGGATTTGAAAGTTGAGAGCAGCATGTTTTGCCCACTGAAACTCATCTGCTGCCAGTG

 P_AAS21503 61 TTGGATTTGAAAGTTGAGAGCAGCATGTTTTGCCCACTGAAACTCATCTGCTGCCAGTG
 ss.DNA68872 121 TTAAGTATTATTCCTTGGGCCTGAATGACTTGAATGTTTCCCGCCTGAGCTAACAGTC

 P_AAS21503 121 TTAAGTATTATTCCTTGGGCCTGAATGACTTGAATGTTTCCCGCCTGAGCTAACAGTC
 ss.DNA68872 181 CATGTGGGTGATTTCAGCTCTGATGGGATGTGTTTTCCAGAGCACAGAAGACAAATGTATA

 P_AAS21503 181 CATGTGGGTGATTTCAGCTCTGATGGGATGTGTTTTCCAGAGCACAGAAGACAAATGTATA
 ss.DNA68872 241 TTCAAGATAGACTGGACTCTGTCAACAGGAGAGCAGCCAAAGGACGAATATGTGCTATAC

 P_AAS21503 241 TTCAAGATAGACTGGACTCTGTCAACAGGAGAGCAGCCAAAGGACGAATATGTGCTATAC
 ss.DNA68872 301 TATTACTCCAATCTCAGTGTGCCTATTGGGCGCTTCCAGAACCAGCGTACACTTGATGGGG

 P_AAS21503 301 TATTACTCCAATCTCAGTGTGCCTATTGGGCGCTTCCAGAACCAGCGTACACTTGATGGGG
 ss.DNA68872 361 GACATCTTATGCAATGATGGCTCTCTCCTGCTCCAAGATGTGCAAGAGGCTGACCAGGGA

 P_AAS21503 361 GACATCTTATGCAATGATGGCTCTCTCCTGCTCCAAGATGTGCAAGAGGCTGACCAGGGA
 ss.DNA68872 421 ACCTATATCTGTGAAATCCGCCTCAAAGGGGAGAGCCAGGTGTTCAAGAAGGCGGTGGTA

 P_AAS21503 421 ACCTATATCTGTGAAATCCGCCTCAAAGGGGAGAGCCAGGTGTTCAAGAAGGCGGTGGTA
 ss.DNA68872 481 CTGCATGTGCTTCCAGAGGAGCCCAAAGAGCTCATGGTCCATGTGGGTGGATTGATTGAG

BLAST RESULTS A-3

P_AAS21503 481 CTGCATGTGCTTCCAGAGGAGCCCAAAGAGCTCATGGTCCATGTGGGTGGATTGATTTCAG

ss.DNA68872 541 ATGGGATGTGTTTTCCAGAGCACAGAAGTGAAACACGTGACCAAGGTAGAATGGATATTT

P_AAS21503 541 ATGGGATGTGTTTTCCAGAGCACAGAAGTGAAACACGTGACCAAGGTAGAATGGATATTT

ss.DNA68872 601 TCAGGACGGCGCGCAAAGGAGGAGATTGTATTTTCGTTACTACCACAACTCAGGATGTCT

P_AAS21503 601 TCAGGACGGCGCGCAAAGGAGGAGATTGTATTTTCGTTACTACCACAACTCAGGATGTCT

ss.DNA68872 661 GTGGAGTACTCCCAGAGCTGGGGCCACTTCCAGAATCGTGTGAACCTGGTGGGGGACATT

P_AAS21503 661 GTGGAGTACTCCCAGAGCTGGGGCCACTTCCAGAATCGTGTGAACCTGGTGGGGGACATT

ss.DNA68872 721 TTCCGCAATGACGGTTCCATCATGCTTCAAGGAGTGAGGGAGTCAGATGGAGGAACTAC

P_AAS21503 721 TTCCGCAATGACGGTTCCATCATGCTTCAAGGAGTGAGGGAGTCAGATGGAGGAACTAC

ss.DNA68872 781 ACCTGCAGTATCCACCTAGGGAACCTGGTGTTCAGAAAACCATTTGTGCTGCATGTCAGC

P_AAS21503 781 ACCTGCAGTATCCACCTAGGGAACCTGGTGTTCAGAAAACCATTTGTGCTGCATGTCAGC

ss.DNA68872 841 CCGGAAGAGCCTCGAACACTGGTGACCCCGGCAGCCCTGAGGCCTCTGGTCTTGGGTGGT

P_AAS21503 841 CCGGAAGAGCCTCGAACACTGGTGACCCCGGCAGCCCTGAGGCCTCTGGTCTTGGGTGGT

ss.DNA68872 901 AATCAGTTGGTGATCATTTGTGGGAATTGTCTGTGCCACAATCCTGCTGCTCCCTGTTCTG

P_AAS21503 901 AATCAGTTGGTGATCATTTGTGGGAATTGTCTGTGCCACAATCCTGCTGCTCCCTGTTCTG

ss.DNA68872 961 ATATTGATCGTGAAGAAGACCTGTGGAAATAAGAGTTCAGTGAATTCTACAGTCTTGGTG

P_AAS21503 961 ATATTGATCGTGAAGAAGACCTGTGGAAATAAGAGTTCAGTGAATTCTACAGTCTTGGTG

ss.DNA68872 1021 AAGAACACGAAGAAGACTAATCCAGAGATAAAAGAAAAACCCTGCCATTTTGAAAGATGT

P_AAS21503 1021 AAGAACACGAAGAAGACTAATCCAGAGATAAAAGAAAAACCCTGCCATTTTGAAAGATGT

ss.DNA68872 1081 GAAGGGGAGAAACACATTTACTCCCCAATAATTGTACGGGAGGTGATCGAGGAAGAAGAA

P_AAS21503 1081 GAAGGGGAGAAACACATTTACTCCCCAATAATTGTACGGGAGGTGATCGAGGAAGAAGAA

ss.DNA68872 1141 CCAAGTGAAAAATCAGAGGCCACCTACATGACCATGCACCCAGTTTGGCCTTCTCTGAGG

P_AAS21503 1141 CCAAGTGAAAAATCAGAGGCCACCTACATGACCATGCACCCAGTTTGGCCTTCTCTGAGG

ss.DNA68872 1201 TCAGATCGGAACAACTCACTTGAAAAAAGTCAGGTGGGGGAATGCCAAAAACACAGCAA

P_AAS21503 1201 TCAGATCGGAACAACTCACTTGAAAAAAGTCAGGTGGGGGAATGCCAAAAACACAGCAA

ss.DNA68872 1261 GCCTTTTGAGAAGAATGGAGAGTCCCTTCATCTCAGCAGCGGTGGAGACTCTCTCCTGTG

P_AAS21503 1261 GCCTTTTGAGAAGAATGGAGAGTCCCTTCATCTCAGCAGCGGTGGAGACTCTCTCCTGTG

ss.DNA68872 1321 TGTGTCTCTGGGCCACTCTACCAAGTGATTTTCAGACTCCCGCTCTCCAGCTGTCCTCCTGT

P_AAS21503 1321 TGTGTCTCTGGGCCACTCTACCAAGTGATTTTCAGACTCCCGCTCTCCAGCTGTCCTCCTGT

BLAST RESULTS A-4

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ss.DNA68872 1381 CTCATTGTTTGGTCAATACACTGAAGATGGAGAATTTGGAGCCTGGCAGAGAGACTGGAC
*****
P_AAS21503 1381 CTCATTGTTTGGTCAATACACTGAAGATGGAGAATTTGGAGCCTGGCAGAGAGACTGGAC
*****
ss.DNA68872 1441 AGCTCTGGAGGAACAGGCCTGCTGAGGGGAGGGGAGCATGGACTTGGCCTCTGGAGTGGG
*****
P_AAS21503 1441 AGCTCTGGAGGAACAGGCCTGCTGAGGGGAGGGGAGCATGGACTTGGCCTCTGGAGTGGG
*****
ss.DNA68872 1501 ACACTGGCCCTGGGAACCAGGCTGAGCTGAGTGGCCTCAAACCCCCCGTTGGATCAGACC
*****
P_AAS21503 1501 ACACTGGCCCTGGGAACCAGGCTGAGCTGAGTGGCCTCAAACCCCCCGTTGGATCAGACC
*****
ss.DNA68872 1561 CTCCTGTGGGCAGGGTTCTTAGTGGATGAGTTACTGGGAAGAATCAGAGATAAAAACCAA
*****
P_AAS21503 1561 CTCCTGTGGGCAGGGTTCTTAGTGGATGAGTTACTGGGAAGAATCAGAGATAAAAACCAA
*****
ss.DNA68872 1621 CCCAAATCAA
*****
P_AAS21503 1621 CCCAAATCAA

```

>3 P_AAZ65110 Membrane-bound protein PRO1387 encoding cDNA. (1630 bp) [1 seg]
Score = 1630 (3231 bits), Expect = 0.0
Identities = 1630/1630 (100%), at 1,1-1630,1630, Strand +/-

```

ss.DNA68872 1 CGGCTCGAGTGCAGCTGTGGGGAGATTTAGTGCATTGCCTCCCCTGGGTGCTCTTCATC
*****
P_AAZ65110 1 CGGCTCGAGTGCAGCTGTGGGGAGATTTAGTGCATTGCCTCCCCTGGGTGCTCTTCATC
*****
ss.DNA68872 61 TTGGATTTGAAAGTTGAGAGCAGCATGTTTTGCCCACTGAAACTCATCCTGCTGCCAGTG
*****
P_AAZ65110 61 TTGGATTTGAAAGTTGAGAGCAGCATGTTTTGCCCACTGAAACTCATCCTGCTGCCAGTG
*****
ss.DNA68872 121 TTACTGGATTATTCCCTTGGGCCTGAATGACTTGAATGTTTCCCCGCCTGAGCTAACAGTC
*****
P_AAZ65110 121 TTACTGGATTATTCCCTTGGGCCTGAATGACTTGAATGTTTCCCCGCCTGAGCTAACAGTC
*****
ss.DNA68872 181 CATGTGGGTGATTTCAGCTCTGATGGGATGTGTTTTCCAGAGCACAGAAGACAAATGTATA
*****
P_AAZ65110 181 CATGTGGGTGATTTCAGCTCTGATGGGATGTGTTTTCCAGAGCACAGAAGACAAATGTATA
*****
ss.DNA68872 241 TTCAAGATAGACTGGACTCTGTACCAGGAGAGCACGCCAAGGACGAATATGTGCTATAC
*****
P_AAZ65110 241 TTCAAGATAGACTGGACTCTGTACCAGGAGAGCACGCCAAGGACGAATATGTGCTATAC
*****
ss.DNA68872 301 TATTACTCCAATCTCAGTGTGCCTATTGGGCGCTTCCAGAACCGCGTACACTTGATGGGG
*****
P_AAZ65110 301 TATTACTCCAATCTCAGTGTGCCTATTGGGCGCTTCCAGAACCGCGTACACTTGATGGGG
*****
ss.DNA68872 361 GACATCTTATGCAATGATGGCTCTCTCCTGCTCCAAGATGTGCAAGAGGCTGACCAGGGA
*****
P_AAZ65110 361 GACATCTTATGCAATGATGGCTCTCTCCTGCTCCAAGATGTGCAAGAGGCTGACCAGGGA
*****
ss.DNA68872 421 ACCTATATCTGTGAAATCCGCCTCAAAGGGGAGAGCCAGGTGTTCAAGAAGGCGGTGGTA
*****
P_AAZ65110 421 ACCTATATCTGTGAAATCCGCCTCAAAGGGGAGAGCCAGGTGTTCAAGAAGGCGGTGGTA

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BLAST RESULTS A-5

ss.DNA68872 481 CTGCATGTGCTTCCAGAGGAGCCCAAAGAGCTCATGGTCCATGTGGGTGGATTGATTGAG

 P_AAZ65110 481 CTGCATGTGCTTCCAGAGGAGCCCAAAGAGCTCATGGTCCATGTGGGTGGATTGATTGAG
 ss.DNA68872 541 ATGGGATGTGTTTTCCAGAGCACAGAAGTGAACACGTGACCAAGGTAGAATGGATATTT

 P_AAZ65110 541 ATGGGATGTGTTTTCCAGAGCACAGAAGTGAACACGTGACCAAGGTAGAATGGATATTT
 ss.DNA68872 601 TCAGGACGGCGCGCAAAGGAGGAGATTGTATTTTCGTTACTACCACAACTCAGGATGTCT

 P_AAZ65110 601 TCAGGACGGCGCGCAAAGGAGGAGATTGTATTTTCGTTACTACCACAACTCAGGATGTCT
 ss.DNA68872 661 GTGGAGTACTCCCAGAGCTGGGGCCACTTCCAGAATCGTGTGAACCTGGTGGGGGACATT

 P_AAZ65110 661 GTGGAGTACTCCCAGAGCTGGGGCCACTTCCAGAATCGTGTGAACCTGGTGGGGGACATT
 ss.DNA68872 721 TTCCGCAATGACGGTTCCATCATGCTTCAAGGAGTGAGGGAGTCAGATGGAGGAACTAC

 P_AAZ65110 721 TTCCGCAATGACGGTTCCATCATGCTTCAAGGAGTGAGGGAGTCAGATGGAGGAACTAC
 ss.DNA68872 781 ACCTGCAGTATCCACCTAGGGAACCTGGTGTTCAGAAAACCATTTGTGCTGCATGTCAGC

 P_AAZ65110 781 ACCTGCAGTATCCACCTAGGGAACCTGGTGTTCAGAAAACCATTTGTGCTGCATGTCAGC
 ss.DNA68872 841 CCGGAAGAGCCTCGAACACTGGTGACCCCGGCAGCCCTGAGGCCTCTGGTCTTGCGTGGT

 P_AAZ65110 841 CCGGAAGAGCCTCGAACACTGGTGACCCCGGCAGCCCTGAGGCCTCTGGTCTTGCGTGGT
 ss.DNA68872 901 AATCAGTTGGTGATCATTGTGGGAATTGTCTGTGCCACAATCCTGCTGCTCCCTGTTCTG

 P_AAZ65110 901 AATCAGTTGGTGATCATTGTGGGAATTGTCTGTGCCACAATCCTGCTGCTCCCTGTTCTG
 ss.DNA68872 961 ATATTGATCGTGAAGAAGACCTGTGGAAATAAGAGTTTCAGTGAATTCTACAGTCTTGGTG

 P_AAZ65110 961 ATATTGATCGTGAAGAAGACCTGTGGAAATAAGAGTTTCAGTGAATTCTACAGTCTTGGTG
 ss.DNA68872 1021 AAGAACACGAAGAAGACTAATCCAGAGATAAAAGAAAAACCCTGCCATTTTGAAAGATGT

 P_AAZ65110 1021 AAGAACACGAAGAAGACTAATCCAGAGATAAAAGAAAAACCCTGCCATTTTGAAAGATGT
 ss.DNA68872 1081 GAAGGGGAGAAACACATTTACTCCCCAATAATTGTACGGGAGGTGATCGAGGAAGAAGA

BLAST RESULTS A-U